ABSTRACT OF THE DISCLOSURE

[0100] The subject invention provides methods of inducing the loss of adipose tissue by providing a diet high in calcium. In one aspect of the invention, the calcium is provided in the form of dairy products. In yet another aspect of the invention, calcium is provided in the form of a dietary supplement, such as calcium carbonate, of vitamin supplements. Methods of suppressing $[Ca^{2+}]_i$ levels in individuals are also provided. The subject invention also provides methods of stimulating lipolysis, inhibiting lipogenesis, and increasing the expression of white adipose tissue uncoupling protein 2 (UCP2). The subject invention also provides methods of increasing the core temperature of an individual.